

CHAPTER 2

CA Water Today

Carolyn Yale EPA 2/19/04

1. a. What THEME do you want for this Chapter?
b. What THEME does it have now?

This chapter should be a neutral overview. The topics as they stand seem eclectic (current water balance snapshots; institutional context and management; challenges). This is OK but it might help the reader to introduce the scope of the chapter up front.

2. Not including writing style or tone – do you have concerns about CONTENT? If so, please describe.

(See below, #6, for more details)

Page 3—The last two paragraphs (on the portfolios, tables relating to existing supply conditions) are weak, in part because they refer to differences with an unidentified former approach to water supplies. I would recommend being straightforward about the strengths and current limitations of the “new approach,” without being apologetic. Explain how the limitations will be remedied in the future. The last paragraph (“Another inadequacy...”) needs to be rewritten. Don’t call it an inadequacy: Explain that these snapshots do not provide for “what if” sequences which might be useful in planning. Chapter 3 gives the impression that there will be future modeling which addresses this desired approach; if so, wouldn’t a reference to work explained later (Chapter 3, scenarios or drought contingency planning) be relevant?

Page 17—On “Releases of water for environmental uses”: would it be fair to add some qualifications as to the extent to which the Code has been applied? Perhaps Scott Cantrell or Environmental Defense have information on this.

Page 21—On “reliability of irrigation water for food production.” I do not agree with all the assumptions, implications and conclusions of this paragraph. Does information on the California agricultural balance of trade support the implication that CA agriculture is producing for the CA population? Is there evidence that the “reallocation” of water from agriculture to other uses has resulted in impaired agricultural output, using economic measures? Given the argument made here for year-to-year reliability, is there room for considering voluntary fallowing? Is there a distinction to be made between involuntary supply curtailments during dry years and episodic voluntary fallowing and transfers of water? In general, the “agricultural challenge” seems too focused on water supplies, alone, without consideration of economic factors and uncertainties/challenges surrounding other variables which affect this sector (markets, urban growth, etc.).

Page 26—Insufficient funding: this is a broader problem than simply the BD Program.

3. What TONE should the writers project? What is the current TONE?

Generally the tone should be neutral and fact-based. There are patches of advocacy in the present text.

4. Are there any significant gaps in the text? What is missing?

Page 8—WE NEED TO COMPLETE THE THOUGHT REGARDING INCLUSION OF THE BASIN PLANS IN THE SWP. What are the implications in terms of programs and policies; activities such as monitoring, reporting, and analysis relating water quality to use; etc.? This isn't something to be answered quickly, but we might identify ongoing/future work on ways in which the two plans and program activities can be mutually supportive.

5. What 5 to 6 KEY messages should a reader walk away with?

6. Other comments:
(referenced page numbers)

1—Para 3, “Prior to the discovery...” This history bypasses the Spanish/Mexican period of CA, which, even if it did not transform the economy or environment, did have an impact on the Native population. Also, check the number given for Native population in CA: too low, or is that post-Mission?

1—Para 4, “Local water agencies...” Is it accurate to imply that the majority of groundwater supplies used are managed by local agencies (given the private use of groundwater)? How is this statement reconciled with the groundwater discussion on page 13? (See p. 13 query below.)

3—Para at top 3, rewrite the first sentence (~~Water quality is generally good...~~): “In upper watersheds and other areas where water diversions and use are modest, water quality is generally good, but many areas elsewhere face water quality problems.”

7—Box: Consider placing agencies hierarchically or at least mention relationships (i.e., agencies within CALEPA).

9—Box: It would be possible to round out some of the federal agency functions (although I don't speak for all these agencies). For example, USBOR also invests in water conservation and reclamation (and has recently, in the Water 2025 document, endorsed support for these activities); USACE has planning and “protection” functions, not just permits, relating to flood management and wetlands. I note no reference to FERC, although in the permitting process for hydropower projects FERC conditions for fisheries and recreation flows can be significant.

13—Groundwater use and management: The second sentence is incomplete. Is the intent a comma after this sentence, so that it goes: “With the exception.... to manage groundwater, any overlying landowner in California....”?

23—Constraints on interregional deliveries: This paragraph is confusing, particularly with the reference to “real” water versus “paper” water, terms of art which are not intuitively obvious to the average earthling. Introduce the subject, which I take to be the various difficulties in accomplishing interregional water transfers/deliveries. Generalize the kinds of problems. With respect to the real/paper discussion: Is there some way of explaining first the conditions under which transfer of water from one region to another are supposed to be permissible, and then explain the difficulties in verifying that these conditions are met?

CHAPTER 3

Planning for an Uncertain Future

Comments from Carolyn Yale EPA 2/19/04

1. a. What THEME do you want for this Chapter?
b. What THEME does it have now?

The key uncertainties which are considered in this Chapter need to be enumerated and classified up front: There are too many, varied lists of uncertainties in the opening paragraphs (droughts, floods, earthquakes, terrorism, climate change, “the future of agriculture in CA,” international trade agreements, contaminants..., unmet environmental water needs, groundwater overdraft,...”).

There are several kinds of uncertainties, mixed together: one set (e.g., climate change) which water planners have little control over and the occurrence, magnitude, and effects of which we may be uncertain; another set (e.g., water quality) which we can directly manipulate, although our efforts may be impeded by uncertainties due to limited information and analysis regarding occurrence, magnitude of problems, and effects; there’s also reference to uncertainty regarding our estimates.

It is unclear which of these uncertainties will be discussed as key uncertainties in this chapter, and whether (and how) the uncertainties will be used in scenario building. In other words, the introduction needs more structure. Maybe a box with the uncertainties listed would help?

2. Not including writing style or tone – do you have concerns about CONTENT? If so, please describe.

Water Quality p1: I offer the following edit of the second paragraph, “As of December 31, 2002, standard waivers of waste discharge requirements for irrigated agriculture and timber harvesting ended, leaving each of the Regional Water Quality Control Boards with responsibilities for establishing programs to address these discharges. At the present time, there is substantial uncertainty regarding future requirements for monitoring and managing runoff from these sources on a statewide basis. The Central Valley Regional Board has adopted an approach which offers group and individual options for compliance within this region, including requirements for water quality monitoring, implementation of management practices, and reporting to the Board. Along with urban runoff, the USEPA has identified agricultural runoff as the most serious threat to water quality in the country, and this holds for intensively agricultural areas of California. While municipal and industrial wastewater and, to some degree, urban runoff is formally regulated and managed, application of biosolids to farms and agricultural drainage, especially in the Central Valley, remain thorny and expensive challenges.”

In the third paragraph under Water Quality, p. 1 (Infrastructure...) is there a reason to single out recycling-related cross-contamination? Might there be a general issue of contamination when infrastructure is used to convey waters of different qualities?

Last paragraph p1, Water Quality: “Our knowledge regarding the nature and impact of contaminants...”

P2 of water quality, recommendations: need to expand beyond drinking water perspective.

For example, the third bullet could refer to “source to use,” rather than source to tap. Fourth bullet could be modified: “Such comprehensive strategies depend on grasping opportunities to develop partnerships across a watershed, between rural communities and agricultural users upstream, and ~~urban~~ users downstream, to protect drinking water sources and maintain fishable, swimmable water quality. There is particular need” The fifth bullet could refer to “Protection of water sources can cost effectively prevent pollution of our ambient waters and drinking water sources.”

The Future Quantitative Analysis section is too long. (Text after p. 8—Analytical tools ff—could be placed in another volume, allowing for short points on resources needed and prospects for the 2008 update.)

3. What TONE should the writers project? What is the current TONE?
4. Are there any significant gaps in the text? What is missing?
5. What 5 to 6 KEY messages should a reader walk away with?

Identify key uncertainties, consequences for this Plan, and what is being/should be done to address in future work.

6. Other:

Chapter 3, Vulnerability... p 1: Earthquakes. Although the second sentence singles out the California Aqueduct, there are a number of large and long aqueducts which are vulnerable (true of the DMC and the EBMUD and Hetch Hetchy systems, for example).

P2, Vulnerability: the box should be labeled: “Potential impacts from a critical Delta levee failure...”

Pp 4-5, Vulnerability, on recommendations: Under strategies to reduce vulnerability, mention that in some areas (for example, portions of the lower SJR) flood vulnerability can be reduced by allowing an expansion of the floodplain and avoiding building and other activities which would put people and property at undue risk.

CHAPTER 4

Regional IRP

Comments from Carolyn Yale EPA 2/18/04

1. a. What THEME do you want for this Chapter?
b. What THEME does it have now?

The regional IRP theme comes through, but would benefit from more effort to ground statements in specifics based on experience/examples. See my comment about reifying “regions” under #2.

2. Not including writing style or tone – do you have concerns about CONTENT? If so, please describe.

A “regional” unit for resource planning can be a nebulous concept. First, be very clear that “regional planning” does not necessarily correspond to the hydrologic regions. You might place a definition box in the early text (see information at the bottom of p. 10). Also, there’s a meaningful distinction to be made between the geographic region within which stakeholders and formal institutions collectively engage in planning, and a “region” as a political/decision-making entity. Some of the text veers towards the latter, which is often a fiction (although JPA’s and other regional organizations with decision-making and implementing authority can formalize the “regional” activities).

I can support the inclusion of watershed management, provided it is very clear that this refers to a watershed approach in the service of IRP for the water management objectives set out in this Plan. There’s a lot of ‘watershed’ activity and funding which doesn’t answer this purpose, although there may be opportunities to incorporate watershed efforts with a limited mission (e.g., water quality, habitat restoration) in a larger IRP process which is supported by water management agencies. Perhaps, “regions” which aren’t faced with major demographic, economic, and water supply challenges—regions which are more concerned with protecting and improving the “natural infrastructure”—can rely more on watershed efforts (e.g., as described in the Joint Task Force documents).

On page 3, second para. (“Each region is well positioned...”): One of the constraints to regional self-sufficiency is said to be “state and federal regulation of local water management activities.” I’m not sure what is intended by this statement, but as written I don’t think it’s informative and respectfully suggest that it either be omitted or reframed. Indeed, the end of a paragraph on the merits of regional efforts isn’t the best place to insert thoughts on constraints. Is there a challenges section for such concerns?

3. What TONE should the writers project? What is the current TONE?

Some of the tone is cautious and cautionary—for example, p. 4, last sentence of the paragraph beginning “While Volume 2 strategies are useful...” Rather than say “be careful” not to do something, provide affirmative guidance.

4. Are there any significant gaps in the text? What is missing?

If you really think there are significant constraints and challenges to regional IRP, a separate topic might be appropriate.

5. What 5 to 6 KEY messages should a reader walk away with?

The section on “Considerations for preparing IRPs” (p. 11) is especially good. Use this to prescribe attributes for effective regional planning.
Highlight sustainability principles.

6. Other:

* Page 18, modest wording suggestion: Consider defining a resource management strategy as a “project, program, or policy,” omitting “~~an item of value.~~”

CHAPTER 5

State Role and Responsibilities

Comments from Carolyn Yale EPA 2/18/04

NOTE: Need to put more work into issues flagged in #4 below.

1. a. What THEME do you want for this Chapter?
b. What THEME does it have now?

See my comments on Chapter 6 supporting the Regional IRP principles and the definition of what to look for in sustainable planning. I think the state role should be defined in ways that reinforce and highlight these concepts.

That said, the first pages of Chapter 5 are weak, and should be reinforced with clear and direct statements. The opening paragraphs/bullets should be a mission statement. Unfortunately, there's still some tentativeness (tension) regarding roles, as reflected in the various concepts combined in the second bullet (see immediately below).

2. Not including writing style or tone – do you have concerns about CONTENT? If so, please describe.

Page 1, second bullet ends with “~~and meeting statewide water demands for all beneficial uses.~~” This statement should be ~~omitted~~, ending the sentence with the reference to public trust resources. (I would argue that, on a practical level, there is no such thing as a statewide water demand and even if there were, meeting it would be a false hope.)

I have a question regarding intent in the third paragraph, page 1: “[T]he state is responsible for assessing the statewide impacts and tradeoffs of proposed regional integrated resource plans to ensure....” Is there really an existing or intended process for such an assessment of RIRPs? While I sympathize with the intent of examining interregional (*statewide*?) impacts of IRPs, maybe we could be clearer about the state role and mechanisms for this activity; is it through assessment? In what context(s)?

Page 2: Two suggestions for the federal agency box (which also applies to Chapter 2)—Since you mention (appropriately) the Bureau’s Water 2025 in the text, you could put it under BOR in the box. Also, was omission of FERC intended? FERC conditions on hydropower licenses can be important for environmental flows.

I offer a new bullet under continuing state role: Ensure improved integration of water quality and water supply planning and management. (You’ve got a commitment that covers it.)

See the last bullet under continuing state role (page 4, starting “Continue to coordinate...”): The last sentence is a bit garbled. There isn’t much that the federal agencies implied in this sentence (US Forest Service, BLM, and BOR) do in the way of “regulating” water resources. Maybe the simplest fix is to omit the “regulating” reference in that sentence. The regulating role falls to agencies such as EPA , FERC,

and in some contexts the COE—but it's not necessary to repeat the information in the box.

3. What TONE should the writers project? What is the current TONE?
4. Are there any significant gaps in the text? What is missing?

Under recommendations, we need to go back through the material on water quality in the strategies and pull key points into a water quality recommendation.

Recommendation #3 is thin (“State carries out its constitutional...”).

5. What 5 to 6 KEY messages should a reader walk away with?
 - New emphasis on regional efforts, supported by the State.
 - State responsibilities regarding public trust, EJ, and environmental protection (including water quality)
 - Need for strong state technical and scientific support

CHAPTER 6

Implementation and funding

Comments from Carolyn Yale EPA 2/18/04

1. a. What THEME do you want for this Chapter?
b. What THEME does it have now?

I note that the current draft contains pieces of the outline for this chapter. No quarrel with the outline topics if they can be filled in. The section on principles for effective regional IRP is excellent and provides a context for discussion of state and regional roles, EJ, science, etc.: I would like to see this approach highlighted (but be sure to mesh with Chapter 4).

The implementation challenges text is thin/weak, which raises concerns for me as to the wisdom of using this as a key theme (as suggested in outline section III)—unless the text can be much improved soon.

2. Not including writing style or tone – do you have concerns about CONTENT? If so, please describe.

While I appreciate the importance of the “challenges” topic, I sense that we’re overlooking or skirting major issues. Polite phrasing masks potential barriers (or time/money sinks): For example, “Belief by some” regarding inadequacy of existing laws... sounds like appeals and lawsuits.... Is there going to be a recommendation regarding processes that will avoid such clashes? As to challenge #4, I believe the generalization (“need to more effectively integrate...”) is on target, but I don’t think the example gets to the real issues impeding integration, which probably have more to do with power, mismatch of costs/benefits, and conflicting interests. Perhaps an example from an area which has successfully negotiated through some of these issues (e.g., lessons learned in the American River Forum or Monterey County) would be instructive regarding impediments and remedies.

3. What TONE should the writers project? What is the current TONE?

If you can retain the caliber of writing in Principles for Effective RIRP... you’re on track. It’s clear and affirmative.

4. Are there any significant gaps in the text? What is missing?

As noted, the text is incomplete (e.g., nothing on financing, tracking implementation) and issues regarding tables are still unresolved. If you keep the content of Table 6.2, it will be necessary to expand on roles for the various entities named. I had a number of earlier criticisms of this table, including: Clarify what’s included in “local utility”

and “regional organization” (where do water districts fit?); reexamine the local government roles (too few identified).

5. What 5 to 6 KEY messages should a reader walk away with?

Key state roles for assistance, and by extension key regional roles

Principles for effective Regional IRP: what the state will look for in providing assistance

Funding strategies, need for sustainable investments in the face of uncertainties

Accountability for results/effects—tracking implementation

6. Comments on the Discussion Items for the 2/18 conference call:

1. Activities which state should assist: The second and third bullets (Provide water management strategies which may be expensive... and Assist regions with water management problems...) could be problematic. I would prefer to say that *assisting regions with water management problems which they can't solve* is a state concern IFF there are consequences of state concern (such as wider impacts, major EJ issues). Likewise, the *state interest in expensive, multiple benefit strategies* would depend on the magnitude and scope of the benefits.
2. I strongly support the sustainable planning principles.